

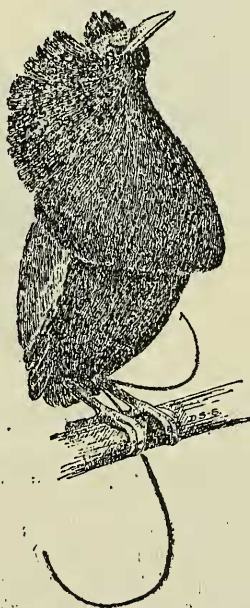
32. On the Display of the Magnificent Bird-of-Paradise,
Diphyllodes magnifica hunsteini. By D. SETH-SMITH,
F.Z.S.

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(Text-figures 1-4.)

At a meeting of this Society, held on February 20th, 1923, I made some remarks on the nuptial display of the various species of the Paradiseidae, and referred especially to that of *Diphyllodes*, of which there was a male example of the form

Text-figure 1.



First attitude of display.

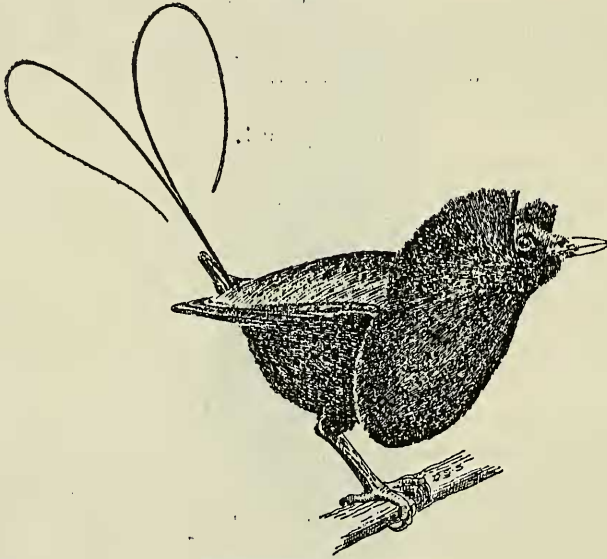
from south-east New Guinea (*D. m. hunsteini*) in the Society's collection. The remarks then made and the drawings exhibited were the result of brief observations, the bird having only recently commenced to display; but since then it has given many

exhibitions, having been displaying on and off for the past five or six months.

Further observations have revealed certain details in the attitude adopted that were not at first apparent.

Dr. Philip Manson-Bahr has spent many hours in sketching this very difficult subject, and his series of beautiful coloured drawings now exhibited will be fully explained by him*. For my own part I decided to try and photograph the bird during display, knowing that in the dull light in which the cage is situated and the presence of intervening bars it was impossible to obtain presentable pictures, but hoping to secure records

Text-figure 2.



Second attitude of display.

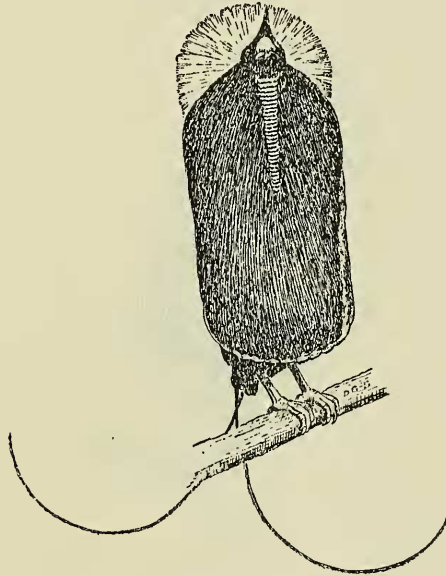
of the different positions adopted, from which it would be possible to make accurate drawings.

Before describing the display of this species it will be as well to give a brief description of the bird itself. About the size of a Starling, it has the top of the head covered with velvet-like feathers of a brownish colour; the back is metallic reddish chestnut, becoming orange on the lower back, the wing-coverts yellow with a distinct shade of orange, the abdomen and under tail-coverts blackish purple. The tail, which is very short

* Dr. Manson-Bahr's series of coloured drawings of this bird have been presented by him to the Zoological Society and placed in the Library.

except for its two middle feathers, is dark brown, the central pair of feathers being produced into very narrow plumes some nine inches in length and of a brilliant metallic green on the upper surface—they cross one another and spread outwards in opposite curves. Covering the under surface of the body from the throat, and occupying the whole of the breast, is a shield of rich velvet-like green, the lower feathers tipped with metallic blue, and down the middle of this, commencing below the black throat, is a narrow band of square-ended feathers of a rich metallic emerald-green. From the hind neck grows a broad

Text-figure 3.



Final attitude with mouth open.

fan-shaped hood of pale yellow plumes, with the texture of spun glass, flanked on each side by tufts of reddish-brown feathers. The bill and feet are blue, and the inside lining of the mouth delicate green.

Birds-of-Paradise comprise one of the few groups of Passerine birds that are polygamous, and where polygamy prevails in birds it is generally accompanied by great adornment of the male sex. Various attitudes of display are adopted, calculated to exhibit these adornments to the best advantage.

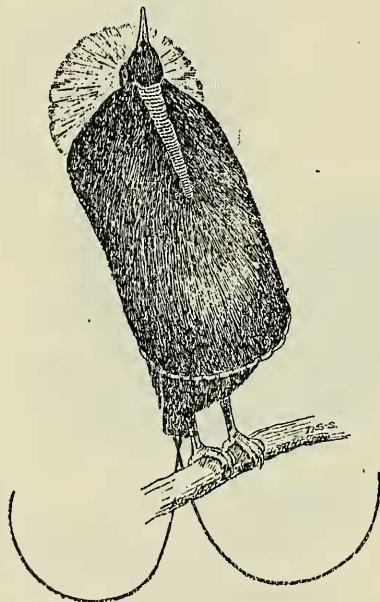
The methods of adornment of the males in the Birds-of-Paradise are very varied and the attitudes adopted during display differ in every genus, that of *Diphyllodes* being entirely

unlike that of any other Bird-of-Paradise so far as our knowledge of these birds goes; and, before the specimen now in the Society's Gardens commenced to display, this remarkable performance had apparently never been witnessed.

There is more than one attitude of display assumed in the case of most birds, and in *D. m. hansteini* there appear to be three or four which, as a rule, follow one another in regular sequence, though frequently the final attitude is assumed without the others.

When inclined to display the bird sits on the perch with the plumage rather relaxed and utters two or three notes sounding

Text-figure 4.



Final attitude with mouth closed.

like *qua-qua-qua*, and then suddenly adopts the attitude depicted in text-fig. 1, the pectoral shield being brought into prominence and its sides thrown up considerably above the level of the head—at the same time the tail being thrown sideways. In the second stage the body is brought into a horizontal position, the sides of the pectoral shield erected, and the central tail-feathers held above the level of the body with their brilliant metallic surfaces visible from the front (text-fig. 2).

In a third stage, which is not often observed, the head is thrown further back and the erected tail more forward, the two long

plumes reaching to the head and being swayed from side to side. In both of these and in the final stage the bill is from time to time opened to exhibit its delicate green lining.

In the final stage, which is depicted in text-figs. 3 and 4, a complete transformation takes place, the body being suddenly brought into an erect position, the nuchal hood of pale yellow feathers flashed into prominence above the head, the pectoral shield lowered to form a broad ribbon-like strip of bright green, down the centre of which now appears a narrow band of iridescent feathers of emerald-green or brilliant blue according to the angle of the light in which it is viewed, while at the lower extremity of the shield appears a narrow edging of the same hue.